

# OWNER'S GUIDE

10 CENTS

Model No. 131-412

## RIDING MOWER

### WARRANTY

For one year from date of purchase MTD Products Inc., will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.

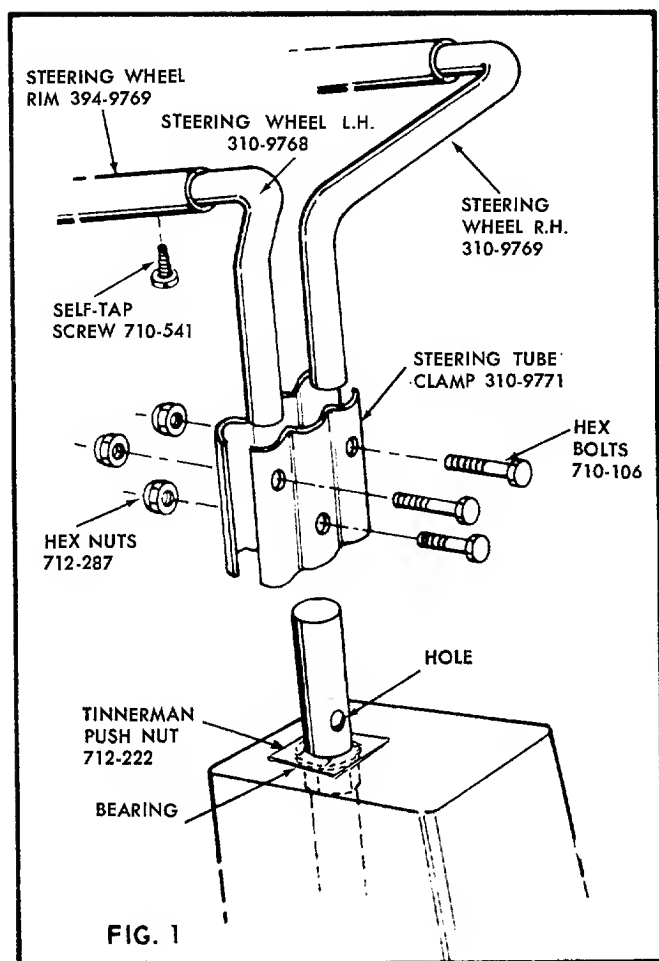
### SAFETY RULES

Your rotary mower is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

1. Remove all sticks, stones, wire and other hazardous items from lawn before mowing. Such items are dangerous to both the mower and individuals in the vicinity of the mower.
2. Always disconnect spark plug cable during repair or refueling operations.
3. Always start engine from side opposite discharge chute.
4. NEVER place hands or feet under mower or near discharge chute while engine is running.
5. Always stop engine when not cutting grass.
6. Do not fill gas tank while engine is running. Do not spill gasoline on hot engine.
7. Keep children and pets away from area at all times during mowing operation. Never allow mower to discharge grass toward any person.
8. Do not attempt to start engine while mower is resting in high grass.
9. Check all nuts and bolts, particularly the blade bolts, for tightness. This is especially important during the initial operation period. Make this same check periodically thereafter.
10. While operating the mower, if any foreign object is struck stop the mower and inspect for damage. Do not restart or operate the mower until all damage has been repaired.

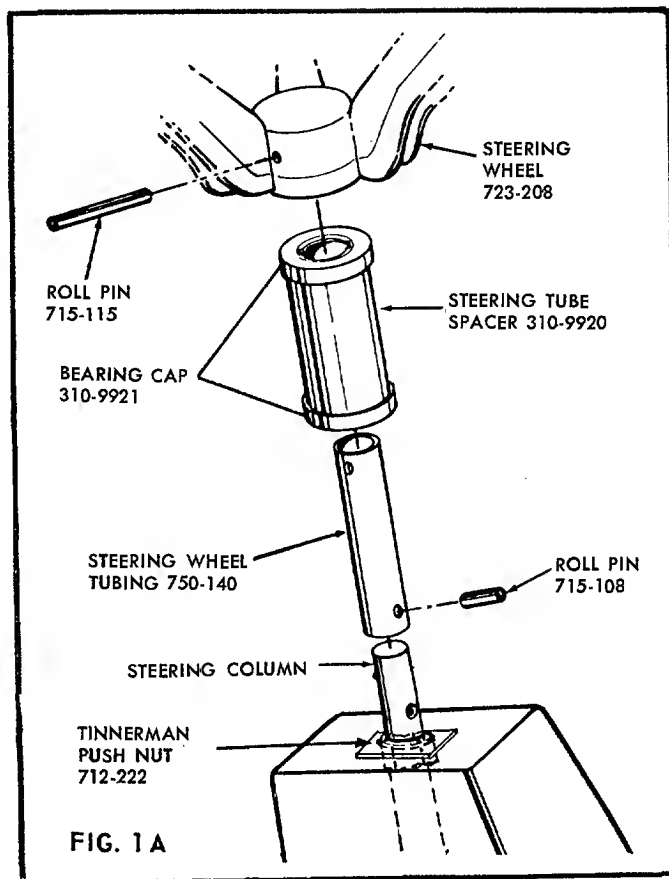
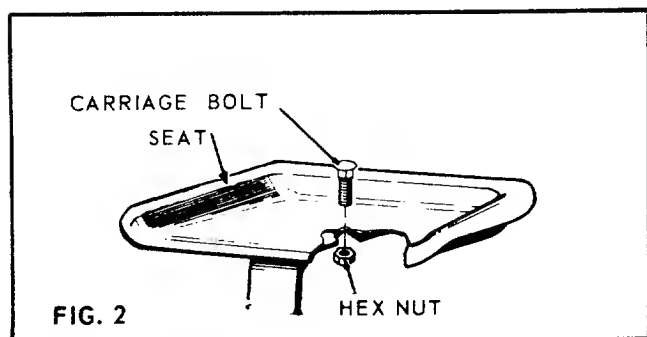
**WARNING:** Should excessive vibration develop, check your blade and blade shaft immediately. Do not operate mower with an unbalanced blade, a damaged blade shaft.

# ASSEMBLY INSTRUCTIONS



## STEERING WHEEL

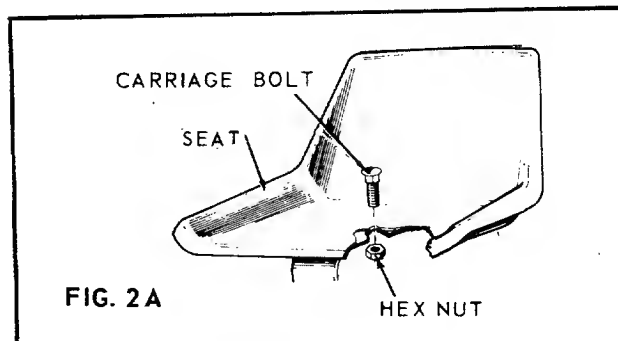
1. Attach steering wheel rim to steering wheel L.H. and R.H. with self tapping screws.
2. Attach steering wheel assembly to steering wheel tube with the two outside hex bolts and lock nuts.
3. Slip washer over steering shaft against the bearing.
4. Attach steering wheel assembly complete to the steering shaft. Be sure that the front wheels are square. Use a drift pin to align the holes in the steering wheel assembly and the steering shaft and use a hex bolt and nut to complete assembly.



## STEERING WHEEL ASSEMBLY (Not Standard Equipment)

1. Be sure holes line up in the steering column and steering wheel tubing. (It may be necessary to use a drift to align the holes)
2. Attach steering wheel tubing to steering column with roll pin.
3. Slide steering tube spacer over steering wheel tubing — be sure that the steering tube spacer lays flush against steering box.
4. Align holes in steering wheel and steering wheel tubing.
5. Drive roll pin through the aligned holes.

## (NOT STANDARD EQUIPMENT)



# KNOW YOUR MOWER

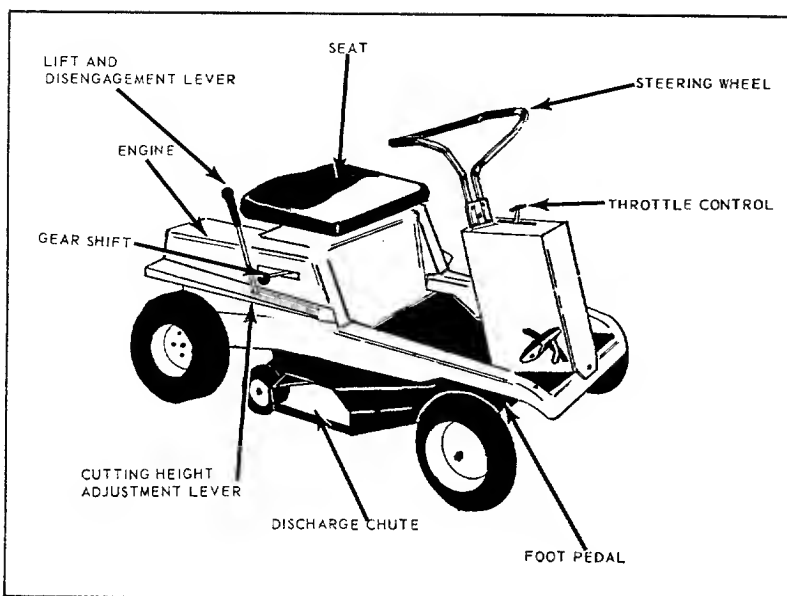


FIG. 3

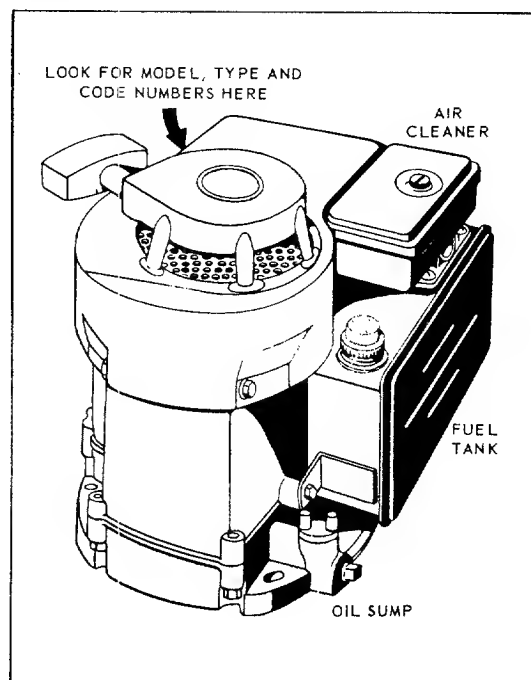


FIG. 4

This Owner's Manual should be read in its entirety before you operate your Rider Mower. The more you know and understand about the machine and its operation, the better job it will do for you. While reading the manual, compare the illustrations with your mower to familiarize yourself with the locations of various controls, lubrication points, attachments, and adjustment features.

Study the operating instructions and safety precautions thoroughly to insure proper functioning of your mower and to prevent injury to yourself and others. Be sure to save this manual for future reference.

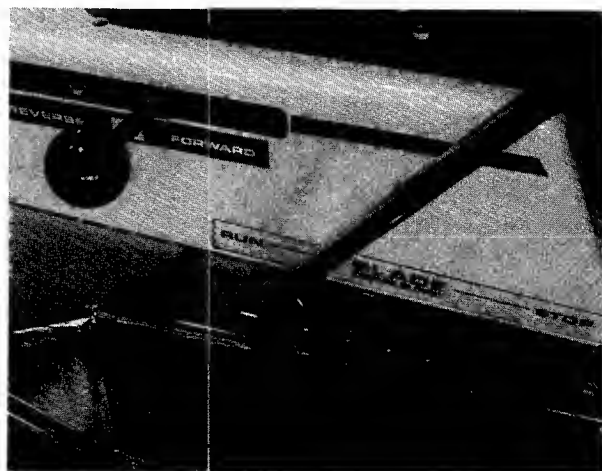


FIGURE 5

## FOOT PEDAL:

The foot pedal is operated with the right foot.

To engage the drive, release the foot pedal which will engage the clutch. The clutch mechanism is operated by a V-belt idler.

To brake, push the foot pedal forward. To lock, depress the foot pedal all the way forward with your toe and it will lock on the frame. To unlock, depress the rear portion of the foot pedal with your heel.

The brake should be used as a parking brake whenever mower is stopped.

## GEAR SHIFT LEVER

The rider has one forward speed and one reverse speed (See Fig. 6).



FIG. 6

## THROTTLE CONTROL

Your engine has a "choke-a-matic" choke. Move the throttle control lever all the way down (See Fig. 7) to place it in the choke position. One lever operates the choke, regulates the engine speed, and stops the engine.

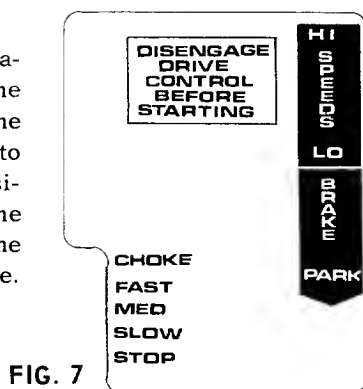


FIG. 7

## LIFT AND DISENGAGEMENT LEVER

The lift and disengagement lever is used to raise and lower the mowing deck (See Fig. 5). When the lever is in the DISENGAGE position the blades WILL NOT revolve. When it is necessary to drive the mower over a small obstruction such as a clump of dirt or a root, place the lift and disengagement lever in DISENGAGE position. This will raise the deck and the blades will stop revolving automatically.

## DIFFERENTIAL (Not Standard Equipment) -

The rear axle differential allows one rear wheel to turn faster than another during turns. Differential action eliminates scuffing of the turf by the rear wheels and permits sharper and easier turning.

**TIRE PRESSURE** - Over-inflation may cause slippage of rear wheels. Under-inflation Rear 7 to 10 psi may cause excessive wear, inner tube damage, or an uneven cut.

## KNOW HOW TO STOP YOUR MOWER

**STOPPING ENGINE** - Move the throttle control to STOP position (See Fig. 7).

**STOPPING MOWER** - Depress the pedal with your toe on the front of the pedal. The pedal will lock and stay in this position until it is released.

**STOPPING BLADES FROM REVOLVING** - With your right hand move the lift lever to DISENGAGE position (See Fig. 5). It can be held in this position by depressing it all the way down and moving it to the left. This operation will stop the blades from rotating as well as raise the mowing deck. The lift lever should be in this position when traveling to and from the work area.

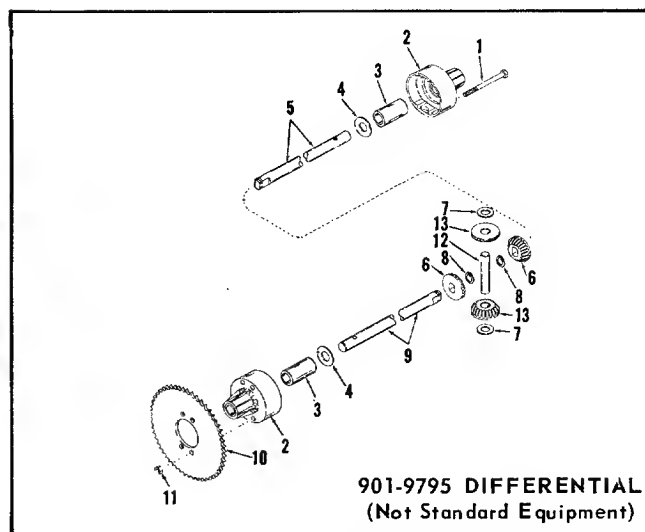


FIGURE 8 - DIFFERENTIAL-EXPLODED VIEW

## PARTS LIST

Ref. No.	Part No.	DESCRIPTION
1	710-363	Hex Head Cap Screw - 5/16-18 x 4" 1g.*
2	719-150	Differential Housing (2 req'd)
3	748-164	Sleeve Bearing (2 req'd)
4	736-188	Washer (2 req'd)
5	738-128	Shaft - Long
6	748-156	Miter Gear Double "D" Hole
7	736-182	Flat Washer (2 req'd)
8	716-101	Truarc Snap Ring (2 req'd)
9	738-127	Shaft - Short
10	394-9054	Sprocket
11	712-158	Hex Centerlock Nut 5/16-18 thd.*
12	711-276	Drive Pin
13	748-158	Miter Gear Round Hole
14	715-123	Dowel Pin (not shown)

\* For faster service obtain standard nuts, bolts, and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

**SEAT** - The seat is adjustable to four positions by removing the single hex nut under the seat spring, repositioning the seat, and tightening the nut. See Fig. 2.

## PUTTING RIDER MOWER IN MOTION

1. Advance the throttle control lever from  $\frac{3}{4}$  to full throttle to prevent strain on the engine and to maintain the necessary speed of the engine to operate the cutting blades.
2. With the foot pedal still depressed forward, move the gear shift lever to the FORWARD POSITION.
3. Slowly release the Clutch-Brake pedal with your foot until the pedal is in the full engaged (DRIVE) position.

## NOTE

Disconnect spark plug wire when the mower is stopped. When stopping the mower for any length of time REMOVE THE SPARK PLUG.

## STARTING INSTRUCTIONS

1. Be sure the crankcase is filled with oil as recommended in engine manual and put regular gasoline in the fuel tank.
2. Attach wire to spark plug and put lift lever in DIS-ENGAGE position.
3. Put gear shift lever in neutral.
4. Depress foot pedal with your toe until it locks.
5. Move throttle control lever to START position.
6. Pull the starter rope with a quick steady motion with your right hand.
7. Slowly return the throttle control lever to the running position after the engine has started.

### CHECKS TO PERFORM IF MOWER WILL NOT START

1. Be sure that there is gasoline in the gasoline tank.
2. Be sure the spark plug wire is connected.
3. Be sure the choke valve is shutting properly. See Adjustment Section.
4. Be sure air filter is clean. See Maintenance Section
5. Clean out chaff and dirt which affects the cooling of the engine. See Maintenance Section.
6. Be sure spark plug is clean. To insure starting, the spark plug should be changed once a year.
7. Your carburetor may require adjustment. Adjust it as outlined in Adjustment Section.
8. Check for flooding. Remove spark plug. If wet, plug should be dried.
9. Check magneto. Hold spark plug wire 3/16 inch from engine. Spark should jump from the terminal to the engine when cranked. If no spark occurs, have the magneto tested.

#### NOTE

A brief break-in period is necessary to insure maximum engine life. This consists of running the engine at half speed for a period of time required to use one tank full of gasoline. This is necessary on the initial run only. It is also recommended that the crankcase oil be changed after the first five (5) hours of operation. This allows for the removal from the crankcase of any impurities which may have accumulated during the break-in period.

## ADJUSTMENTS

### THROTTLE CONTROL —

#### To Check Operation:

1. Remove air cleaner.
2. Move throttle control lever to CHOKE position. The carburetor choke should be closed.
3. Move throttle control lever to STOP position. Lever should make good contact with stop switch.

#### To Adjust:

Place throttle control lever on in FAST (high speed) position. Loosen control casing clamp screw "B". Move control casing "A" and wire until lever "D" touches choke operating link at "C". Tighten casing clamp screw "B". Replace air cleaner.

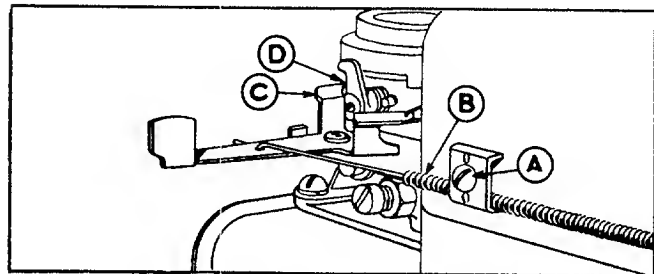


FIG. 9

### CARBURETOR ADJUSTMENTS

Carburetors are adjusted at the factory and normally do not need adjustment unless they have been disassembled.

#### Initial Adjustment After Re-assembly

Turn needle valve clockwise until it just closes. CAUTION: Valve may be damaged by turning it in too far. Now open needle valve 1-1/8 turns counterclockwise. Close idle valve in same manner and open 1-1/8 turns. This initial adjustment will permit the engine to be started and warmed up prior to final adjustment.

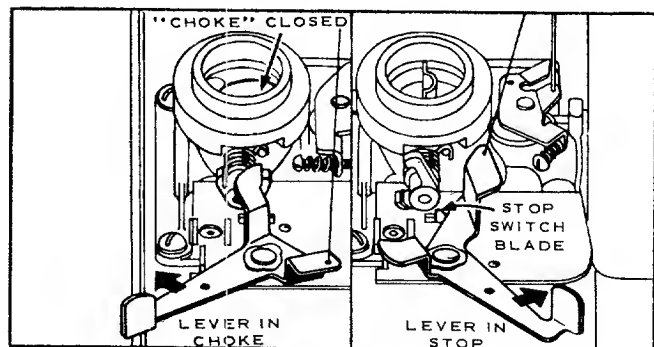


FIG. 10

#### Final Adjustment (See Fig. 10)

Turn needle valve in until engine misses (lean mixture). Then turn it out past smooth operating point until engine runs unevenly (rich mixture). Now turn needle valve to the mid-point between rich and lean so the engine runs smoothly.

Hold throttle at idle position and set idle speed adjusting screw until fast idle is obtained (1750 RPM). Hold throttle in idle position and turn idle valve in (lean) and out (rich) until engine idles smoothly. Then reset idle speed adjusting screw so that engine idles at 1750 RPM. Release throttle - engine should accelerate without hesitation or sputtering. If engine does not accelerate properly, the carburetor should be re-adjusted to a slightly richer mixture.

**CUTTING HEIGHT** - Your rider mower is designed to mow grass at various heights. To disengage the power to the blades move the lift and disengagement lever to the DISENGAGE position. The blades will not rotate when the lift lever is in this position. However, ALWAYS shut the engine off and disconnect the spark plug wire when cleaning grass from the discharge chute.

There are two ways to set the mowing height on your rider mower. One setting is for rough mowing and the other is for normal mowing.

**NORMAL MOWING** - Set your mowing height with the individual wheel adjusters located on the deck. Move the height adjustment handle all the way to LOW CUT position. Place the lift and disengagement lever in ENGAGE position. This will allow the deck to "float" and follow the contour of the ground.

**CUTTING HEIGHT** - Adjustment may be made by removing and moving wheel studs on the cutting deck to desired position. Cutting heights will be raised as wheel studs are moved to a lower hole and lowered as wheel studs are moved to a higher hole in the deck. Both wheel studs must be mounted in a relative position to the deck.

**ROUGH TERRAIN MOWING** - With the lift and disengagement lever you may select one of five height settings by moving the lever to your left and back to the desired mowing height (see Fig. 11). Set the individual wheel adjusters so that the wheels clear the ground by  $\frac{1}{4}$ " to prevent scalping.

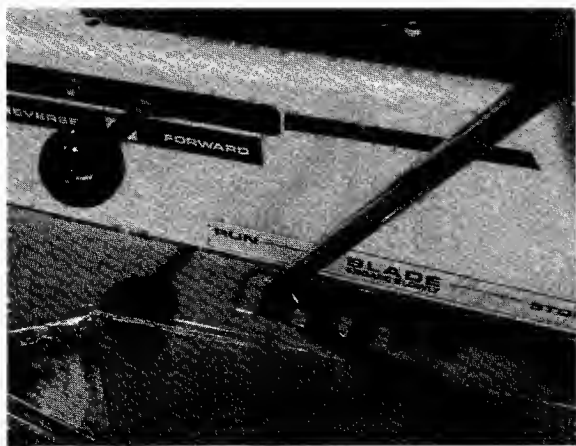


FIG. 11 - LIFT LEVER ADJUSTMENT

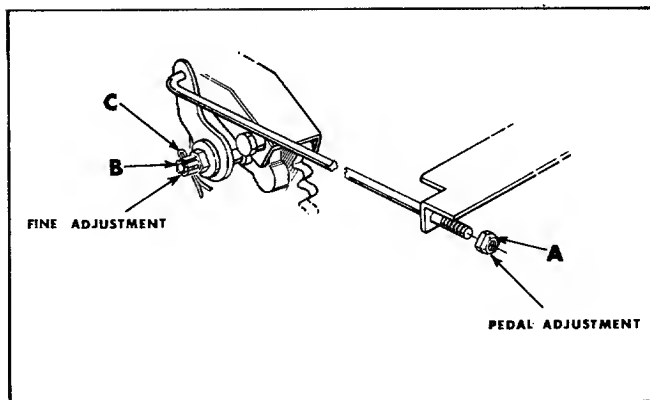


FIG. 12

**PEDAL ADJUSTMENT** - To take up the adjustment on the brake linkage, tighten or loosen the hex nut (A) on brake linkage. (See Fig. 12).

**FINE BRAKE ADJUSTMENT** - Remove hair pin (C). Turn the castle nut (B) clockwise to tighten one quarter revolution and check brakes. Repeat as necessary to have proper braking power. Replace hair pin (C). (See Fig. 12).

**CHAIN ADJUSTMENT** - After the first five hours of operation the initial slack should be removed from the chain. The chain should be tight enough so that it deflects approximately  $\frac{1}{2}$ " when it is depressed with your thumb.

To remove the slack, turn the adjusting bolt (Ref. 33A) clockwise with a  $\frac{1}{2}$ " open end or box wrench until the proper tension is obtained. The adjusting bolt is located under the frame of the mower in front of the transmission pulley. Chain adjustment screw (Ref. 33A) is mounted on the transmission mounting plate (Ref. 95).

## MAINTENANCE

**BEARINGS** - Lifetime graph oil front wheel bearings and rear axle spherical bearings require little lubrication. However, a light film of oil applied to these bearings will reduce normal friction. Maintain a light film of oil on the chain at all times, except where mower is used under extremely dusty conditions. Lubricate all other moving parts with light oil after every 25 hours of operation. Bearings in the clutch idler and the blade spindles are permanently sealed and require no lubrication.

**TRANSMISSION** - The transmission is filled at the factory and requires no further lubrication.

**BLADES** — Sharp and balanced blades are essential for efficient mowing and long mower and engine life. When sharpening blades, file equal amounts of metal from each side. The blades should be balanced before they are reinstalled. An unbalanced blade will cause excessive vibration and undue wear on the mower and the engine. When reassembling, all parts must be installed in the proper order and fastened securely.

## REMOVING BLADES

Remove the 3/8" bolt and lockwasher. Pull the blade and adapter off the mower deck. To remove the adapter from the blade, remove the two 5/16" bolts, lockwashers and nuts. See Fig. 13.

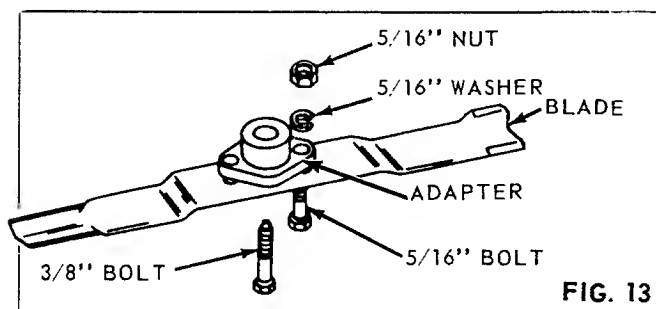


FIG. 13

### NOTE

All set screws are held in place with a bolt and nut sealant (such as Loctite). To remove set screws, heat the set screw to approximately 400° F with a butane or similar torch and then remove with an Allen wrench. When replacing the set screws, it is not necessary to remove all the old traces of the sealant; however, they must be free of grease and oil before applying more sealant. Gasoline will clean these parts.

**MOWER DECK** — The underside of the mower deck should be cleaned after each period of use as grass clippings, leaves, dirt, and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next mowing.

The deck may be cleaned by tilting the mower on its left side, so that it rests on a block, as shown in Fig. 15. Scrape clean with a suitable tool or by washing with a stream of water from a garden hose. Be sure to disconnect the spark plug wire and ground it while performing this maintenance.

### CAUTION

Do not direct the stream of water at a hot engine as damage to the engine may result.

Remove spark plug wire and ground before attempting any adjustments on the mower.

## BELT REMOVAL

To remove either or both belts:

1. Place foot pedal in "brake" position.
2. Move lift lever into disengaged position. See Fig. 5.
3. Remove engine belt guard. Remove the two rear hex nuts on the engine bolts to remove the engine belt guard and pivot the guard away from the chain and remove. See Fig. 15.
4. Remove the blade drive belt from the engine pulley.
5. With the lift lever, lower the deck away.

To remove the blade drive belt: (See Fig. 15)

6. Remove both belt guards on the cutting deck.
7. Remove belt and reassemble with new belt.

To remove the transmission drive belt: (See Fig. 15)

6. Lock foot pedal and unlock idler spring.
7. Remove snap ring on transmission pulley.
8. Remove idler pulley by removing hex nut.
9. Remove belt and reassemble with new belt.

Change oil after first 5 hours of operation. Thereafter, change oil every 25 hours of operation. Remove oil drain plug and drain oil while engine is **warm**. Replace drain plug. Remove oil filler plug and refill with new oil of proper grade. Replace oil filler plug.

## CLEAN COOLING SYSTEM

Grass or chaff may clog cooling system after prolonged service in cutting tall dry grasses or hay. Continued operation with a clogged cooling system causes severe overheating and possible engine damage. Remove blower housing and clean regularly. See Fig. 14.

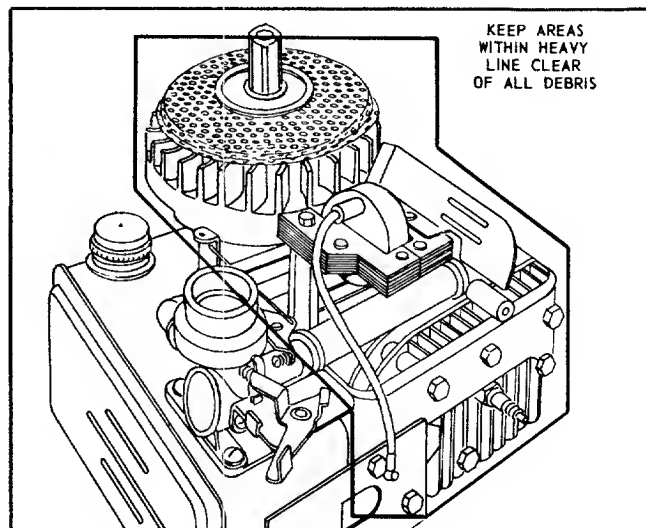


FIG. 14

# BELT REPLACEMENT 131-412

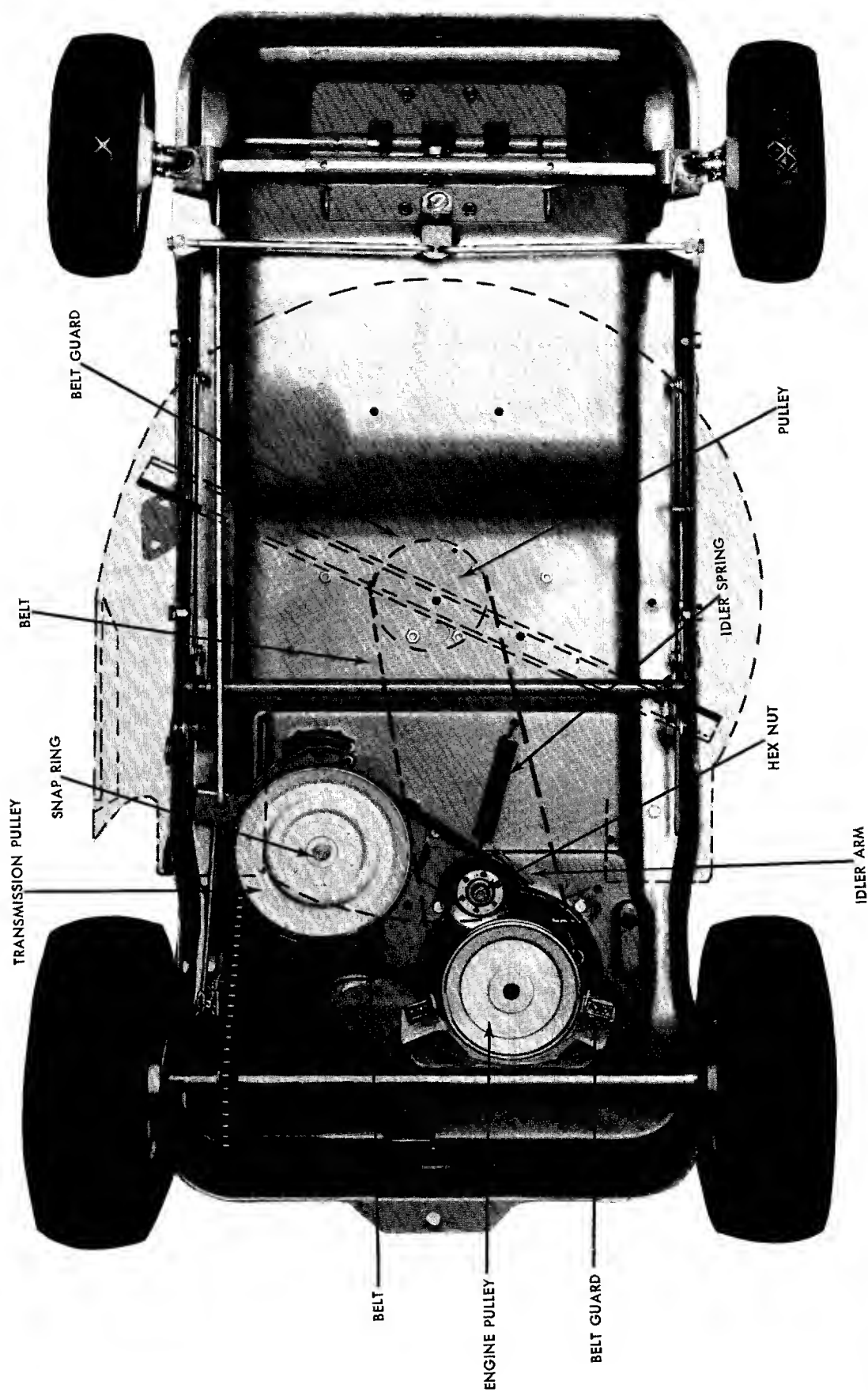


FIG. 15

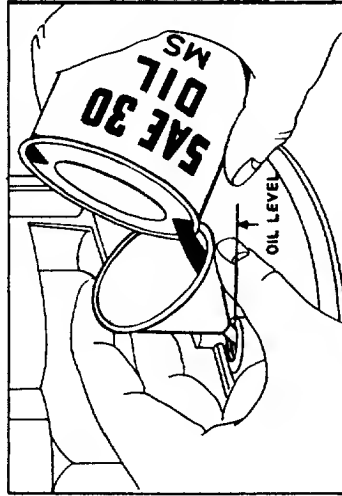


# LUBRICATION

## 1. ENGINE

### *Fill Sump Pump With Oil*

Remove the oil filler plug or oil minder located on base of engine. Place the engine level. Fill the oil sump to overflowing. POUR SLOWLY. CAPACITY 2-1/4 pints. Replace the filler plug.



### OIL RECOMMENDATIONS

#### SUMMER

(Above 40° F.)  
Use SAE 30

#### WINTER

(Below 40° F.)  
Use SAE 5W-20

Lubrication points 2 thru 5 have oil impregnated bronze bearings and do not have to be lubricated, however, a light film of oil applied to these bearings will reduce normal friction. Use engine oil for lubrication points 2 thru 8.

2. Upper and lower bearings in steering (Total 2 bearings)
3. Front wheel bearings (Total 4 bearings)
4. Front axle bearings (Total 4 bearings)
5. Rear axle bearings (Total 2 bearings)
6. All deck linkage.
7. Clutch pedal linkage.
8. Throttle control and cable — wipe oil rag entire length of cable.
9. Wheels on cutting unit to be greased once each season with multi-purpose automotive grease. Use hand or pressure type gun.
10. Chain (not shown) oil entire length of chain and wipe off excessive oil.
11. Transmission — sealed at factory, does not require checking. (Lubricated with 4 oz. No. 310 Lubriplate).
12. Differential (Not Standard Equipment) — sealed at factory, does not require checking. (Lubriplate with 2 oz. of No. 310 Lubriplate).

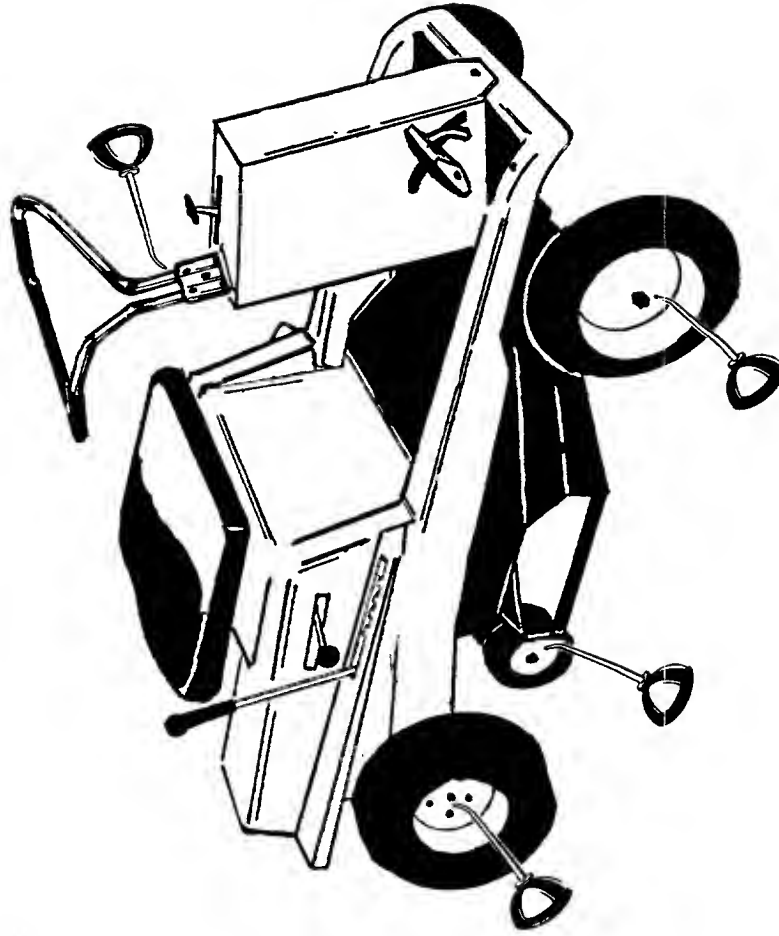


FIG. 16

# OFF SEASON STORAGE

## NOTE

Engines to be stored over 30 days should be completely drained of fuel to prevent gum deposits forming on essential carburetor parts, fuel filter, fuel lines, and tank.

1. Remove all fuel from fuel tank. Run the engine until it stops from lack of fuel. The small amount of fuel that remains in the sump of the tank should then be removed by absorbing it with a clean, dry cloth.
2. While engine is still warm, drain oil from crankcase. Refill with fresh oil.
3. Remove spark plug, pour 1 ounce of SAE-30 oil into cylinder, and crank slowly to distribute oil. To prevent accidental starting, DO NOT replace the spark plug.
4. Clean dirt and chaff from cylinder, cylinder head fins, and blower housing.
5. Clean all grass from underside of deck.
6. Clean the air filter.
7. Place blocks under frame of mower so that the wheels are off the ground.
8. Cover all bare metal parts, such as the mowing edge of the blades, with grease to prevent rusting.
9. Cover the mower with a tarpaulin, or other protective covering.

## SERVICE AIR CLEANER REGULARLY

When assembling make certain the lip of the foam element extends over edge of the air cleaner body. The foam element will form a protective seal.

1. Remove two screws and lift off complete air cleaner assembly.
2. Remove screen and spacers from foam element.
3. Remove foam element from air cleaner body.
4. A. Wash foam element in kerosene or liquid detergent and water to remove dirt.  
B. Wrap foam in cloth and squeeze dry.  
C. Saturate foam in engine oil. Squeeze to remove.  
D. Assemble parts - fasten to carburetor with screw.  
See Fig. 17.

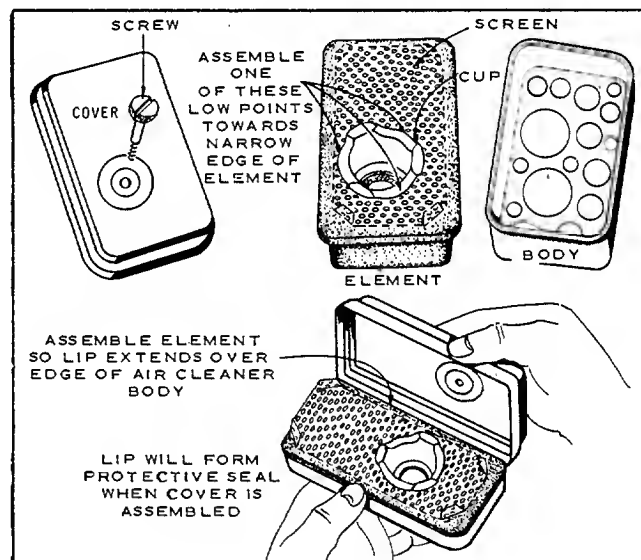


FIG. 17

NOTE: This instruction manual covers various models and all accessories shown do not necessarily apply to your model mower.

If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines - Gasoline"



131-412

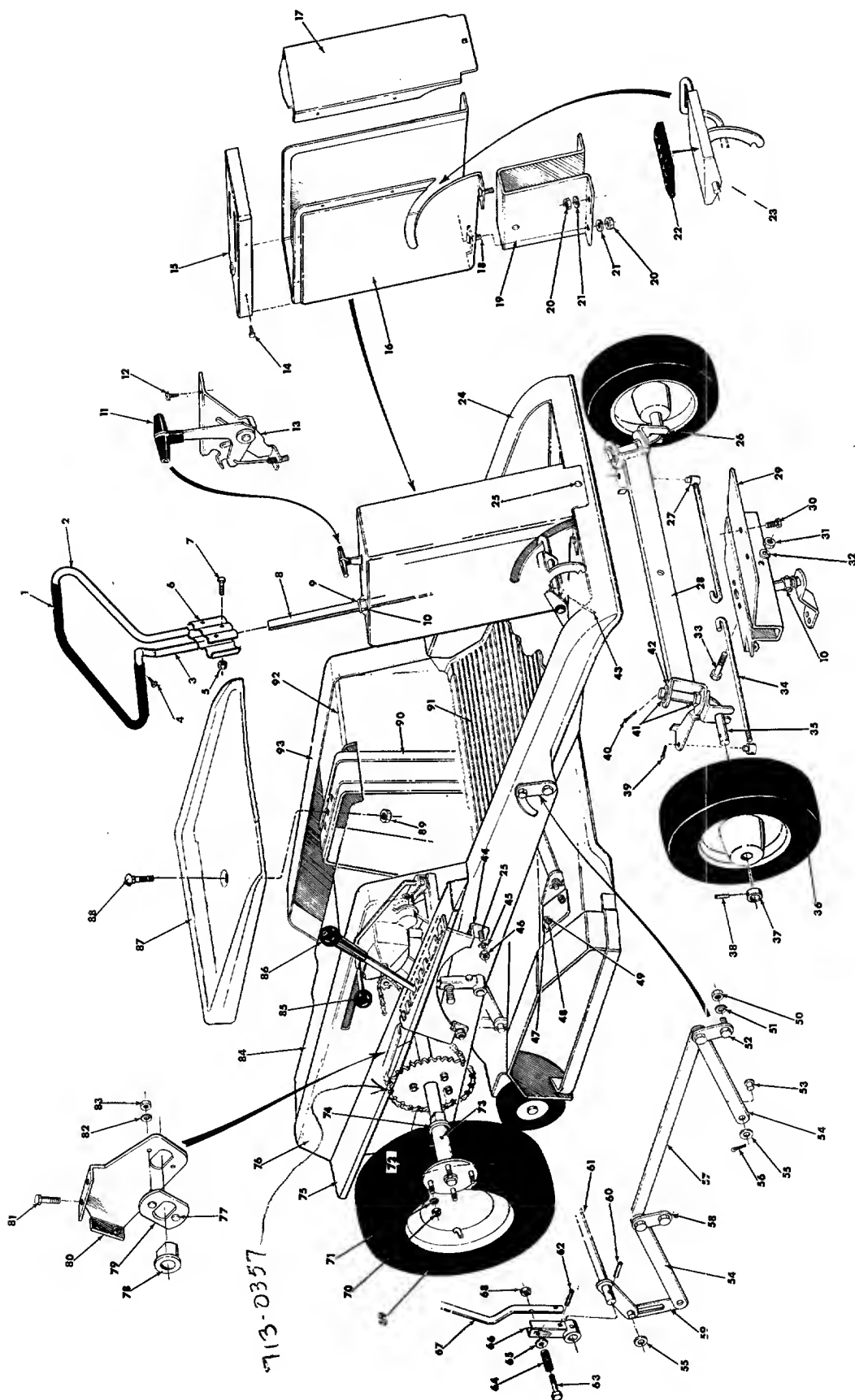


FIG. 18

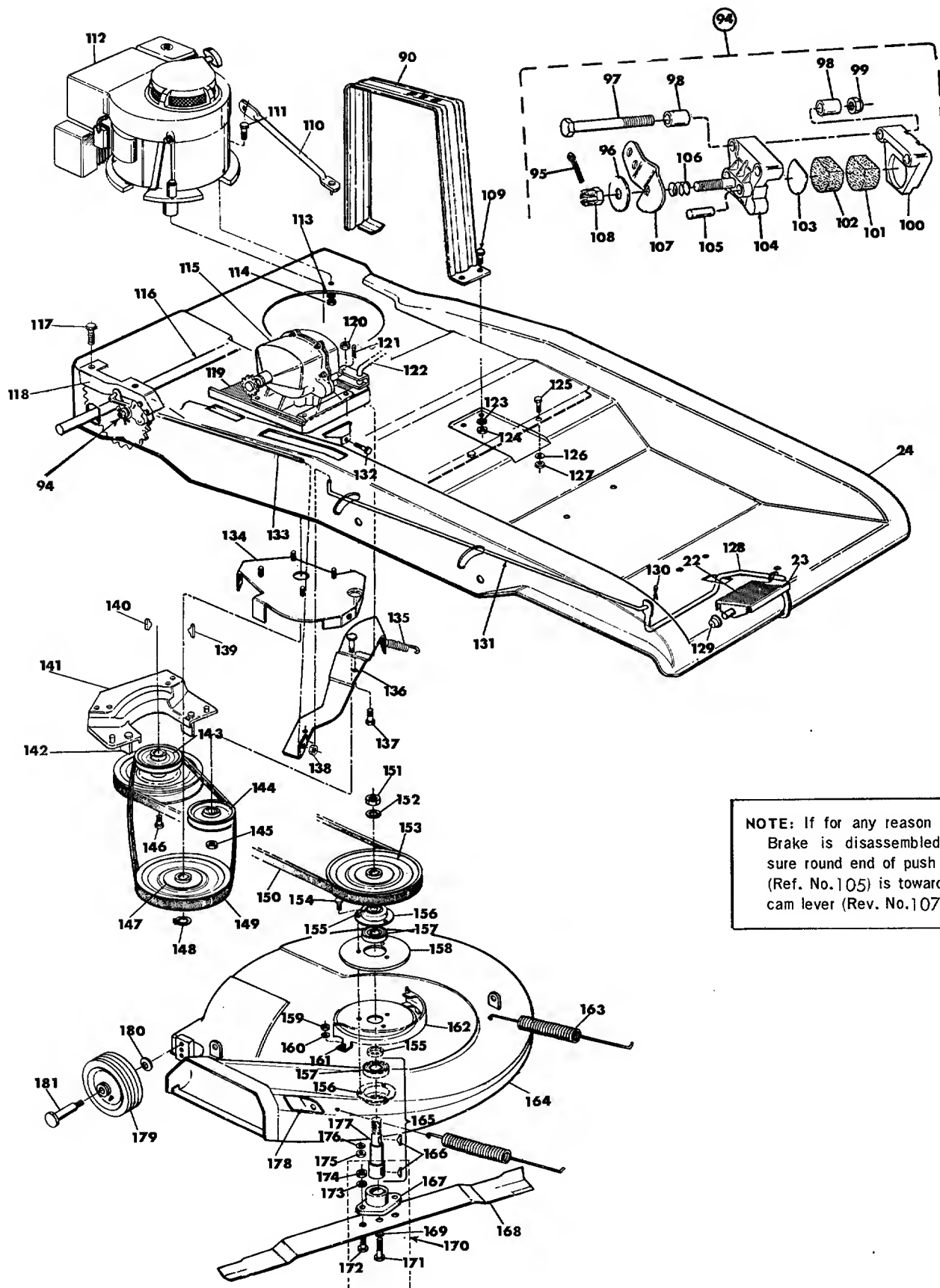


FIG. 19

# PARTS LIST FOR MODEL 131-412

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	394-9769	Steering Wheel Rim	75	437-10809	Rear Fender—R.H.
2	310-9768	Steering Wheel—L.H.		437-10810	Rear Fender—L.H. (Not Shown)
3	310-9767	Steering Wheel—R.H.	76	312-10824	Engine Box Side Panel—R.H.
4	710-541	Sheet Metal Screw #8*	77	710-272	Hex Hd. Cap Scr. 10-24 x 1/2" Lg.*
5	712-287	Hex Nut 1/4-20 Thd.*	78	748-151	Flange Bearing 3/4" I.D.
6	310-9771	Steering Tube Clamp	79	437-10470	Bearing Plate
7	710-106	Hex Hd. Cap Scr. 1/4-20 x 1 1/4" Lg.*	80	437-10471	Rear Axle Support Bracket Ass'y.
8	310-9922	Steering Shaft Assembly	81	710-378	Hex Hd. Cap Scr. 5/16-18 x 1/2" Lg.*
9	712-222	Tinnerman Push Nut	82	736-119	Spring Lockwasher 5/16 Scr.*
10	748-227	Flange Bearing 5/8 I.D.	83	712-267	Hex Nut 5/16-18 Thd.*
11	722-111	Knab—Thrattle Cantral	84	312-10827	Engine Box Tap Panel
12	710-272	Hex Hd. Cap Scr. 10-24 x 1/2" Lg.*	85	722-115	Knab—Gear Shift
13	746-148	Thrattle Cantral Cam	86	720-143	Handle Grip
14	710-127	Sheet Metal Scr. #10 Thd. x 1/2" Lg.*	87	312-9909	Seat
15	437-10822	Steering Box—Tap Cover	88	710-385	Carriage Bolt 1/2-13 x 1" Lg.*
16	437-10819	Steering Box	89	712-384	Hex Center Locknut 1/2-13 Thd.*
17	437-10818	Steering Box—Frant Cover	90	312-10174	Seat Bracket Ass'y.
18	710-259	Hex Hd. Cap Screw 5/16-18 x 5/8" Lg.*	91	735-117	Flaar Mat (Optional)
19	437-10832	Brake Lever Bracket	92	312-10826	Engine Box Frant Panel
20	712-267	Hex Nut 5/16-18 Thd.*	93	312-10825	Engine Box Side Panel—L.H.
21	736-119	Spring Lockwasher 5/16" Scr.*	94	723-229	Disc Brake Ass'y.†
22	305-10614	Faat Pedal Pad	95	5-1012	Catter Pin†
23	347-10848	Faat Pedal Ass'y.	96	3-1030	Thrust Washer 5/16 I.D.†
24	347-10057	Frame	97	1-1187	Hex Hd. Cap Scr. 5/16-24 x 2 3/4" Lg.†
25	710-260	Carriage Bolt 5/16-18 x 5/8" Lg.*	98	1171-2	Bushing 5/16 I.D. x 1/2" Lg.†
26	310-9709	Axle Ass'y.—Frant L.H.	99	2-1014	Hex Locknut 5/16-24 Thd.†
27	711-198	Tie Rad End	100	1536	Casting—Carrier Side†
28	437-9711	Pivot Bar Ass'y.	101	1154-J-49	Friction Pad (.250 Thick)†
29	437-9728	Frant Pivot Bracket	102	1154-J-79	Friction Pad (.450 Thick)†
30	710-272	Hex Hd. Cap Scr. 10-24 x 1/2" Lg.*	103	3-1031	Back-Up Disc†
31	712-923	Locknut 5/8 Thd.*	104	1027	Casting—Cam Side†
32	736-158	Spring Lockwasher 5/8 Scr.*	105	5-1033	Push Pin†
33	710-312	Hex Hd. Cap Scr. 5/8-18 x 1.31" Lg.	106	6-1029	Compression Spring†
34	711-335	Tie Rad	107	1210	Cam Lever†
35	310-9706	Axle Ass'y.—Frant—R.H.	108	2-1011	Castle Nut†
36	503-10151	Frant Wheel Ass'y.—Complete	109	710-198	Sems Hex Hd. Scr. 5/16-18 x 3/4" Lg.*
	734-347	Tire—10.25 x 3.25	110	394-10400	Engine Brace Ass'y.
	748-227	Frant Wheel Bearings	111	710-422	Hex Hd. Cap Scr. 5/16-18 x 1 1/2" Lg.*
37	711-169	Callar 5/8 I.D.	112	—	Engine
38	710-421	Allen Set Screw 5/16-18 x 1/4" Lg.*	113	736-119	Spring Lock Washer 5/16 Scr.*
39	714-111	Catter Pin*	114	712-267	Hex Nut 5/16-18 Thd.*
40	714-111	Catter Pin*	115	901-8500	Transmission—Complete
41	748-227	Flange Bearing	116	310-10405	Rear Axle Ass'y.
42	736-860	Flat Washer .64 I.D.	117	710-378	Hex Hd. Cap Scr. 5/16-18 x 2 1/2" Lg.*
43	715-103	Roll Pin	118	437-10245	Disc Brake Bracket Ass'y.
44	437-10836	Index Bracket	119	437-10247	Transmission Plate
45	736-119	Spring Lockwasher 5/16 Scr.*	120	712-429	Hex Elastic Stap Nut 5/16-18 Thd.*
46	712-267	Hex Nut 5/16-18 Thd.*	121	714-507	Catter Pin*
47	712-287	Hex Nut 1/4-20 Thd.*	122	310-10846	Shift Lever Ass'y.
48	736-329	Spring Lockwasher 1/4 Scr.*	123	736-119	Spring Lockwasher 5/16 Scr.*
49	710-255	Truss Hd. Mach. Scr. 1/4-20 x 3/4" Lg.*	124	712-267	Hex Nut 5/16-18 Thd.*
50	712-267	Hex Nut 5/16-18 Thd.*	125	710-286	Truss Hd. Mach. Scr. 1/4-20 x 1/2" Lg.*
51	736-119	Spring Lockwasher 5/16 Scr.*	126	736-329	Spring Lockwasher 1/4 Scr.*
52	711-118	Shoulder Bolt 5/16-18	127	712-287	Hex Nut 1/4-20 Thd.*
53	711-332	Lift Bracket Pin	128	310-10052	Faat Pedal
54	437-9761	Deck Link Ass'y.	129	726-221	Push Cap 1/2 Dia.
55	736-160	Flat Washer	130	714-507	Catter Pin*
56	714-101	Hairpin—Catter	131	310-10079	Faat Pedal Rad
57	437-9735	Connecting Rad	132	710-117	Hex Hd. Cap Scr. 5/16-24 x 1" Lg. Heat.Treated
58	437-9721	Pivot Link Assembly	133	711-439	Brake Rad
59	437-9737	Lackaut Link	134	437-10086	Belt Guard—Transmission
60	715-107	Spiral Pin 5/16 x 1.38" Lg.*	135	732-121	Extension Spring—Idler
61	437-10838	Lift Shaft Ass'y.	136	437-9778	Idler Bracket Ass'y.
62	715-108	Spiral Pin 1/4 x 1" Lg.*	137	711-118	Shoulder Bolt
63	710-501	Hex Hd. Mach. Scr. 1/4-20 x 2" Lg.*	138	712-324	Hex Elastic Stap Nut 1/4-20 Thd.*
64	732-224	Spring—Compression	139	714-868	Key Waadruff #9*
65	736-860	Flat Washer	140	714-365	Key—Hi Pra #505*
66	310-10841	Handle Bracket	141	437-10423	Belt Guard—Engine
67	310-10837	Lift Handle	142	437-10426	Belt Keeper
68	712-107	Hex Center Locknut 1/4-20 Thd.*	143	756-141	Pulley—Twa Step
69	501-10108	Rear Wheel Ass'y.—Complete	144	756-116	V-8elt Idler
	734-301	Tire Only	145	712-116	Hex Elastic Stap Nut 3/8-24 Thd.*
70	712-798	Hex Nut 3/8-16 Thd.*	146	710-152	Hex Hd. Cap Scr. 3/8-24 x 1" Lg.*
71	736-217	Spring Lockwasher 3/8 Scr. Heavy Duty	147	756-156	Pulley—Transmission
72	312-9714	Rear Hub—Ass'y.	148	716-115	Snap Ring
73	715-107	Spiral Pin 5/16 x 1.38" Lg.*	149	754-101	V-8elt-Drive 1/2 x 35 Lg.*
74	748-151	Flange Bearing 3/4" I.D.	150	754-138	V-Belt-Deck 21/32 x 50 Lg.*

# PARTS LIST CONTINUED

REF. NO.	PART NO.	DESCRIPTION
151	712-923	Locknut 5/8 Thd.*
152	736-158	Spring Lockwasher 5/8 Scr.*
153	756-143	Pulley Deck
154	710-322	Sems Hex Hd. Cap Scr. 5/16-18 x 1" Lg.*
155	750-142	Spacer**
156	310-8253	Bearing Housing**
157	741-919	Ball Bearing**
158	437-10069	Deck Reinforcement**
159	712-287	Hex Nut 1/4-20 Thd.*
160	736-329	Spring Lockwasher 1/4 Scr.*
161	710-286	Truss Hd. Mach. Scr. 1/4-20 x 1/2" Lg.*
162	437-10058	Belt Guard—Deck
163	732-153	Extension Spring
164	437-9763	Deck Assembly
165	901-10150	Blade Spindle Ass'y.—Comp.**
166	714-365	Key—Hi Pro #505**
167	748-189	Blade Adapter††
168	312-9283	Blade—25"
169	736-217	Spring Lockwasher 3/8 Scr. Heavy Duty††
170	901-10769	Blade Adapter Kit/Less Blade
171	710-459	Hex Hd. Cap Scr. 3/8-24 x 1 1/2" Lg. Heat Treated††
172	710-117	Hex Hd. Cap Scr. 5/16-24 x 1" Lg. Heat Treated††
173	736-119	Spring Lockwasher 5/16 Scr.*††
174	712-123	Hex Nut 5/16-24 Thd.*††
175	712-267	Hex Nut 5/16-18 Thd.**
176	736-119	Spring Lockwasher 5/16 Scr.**
177	711-405	Blade Spindle**
178	437-10147	Deck Bracket
179	501-10237	Wheel Ass'y.—Cutting Deck
180	736-105	Belleville Washer
181	738-119	Axle Bolt—Cutting Deck

\*For faster service obtain standard nuts, bolts, and washers locally.  
If these items cannot be obtained locally, order by part number and size as shown on parts list.

\*\*Part of Blade Spindle Assembly Complete—901-10150.

†Port of Disc Brake Assembly Complete—723-229.

††Port of Blade Adapter Kit/Less Blade—901-10769.

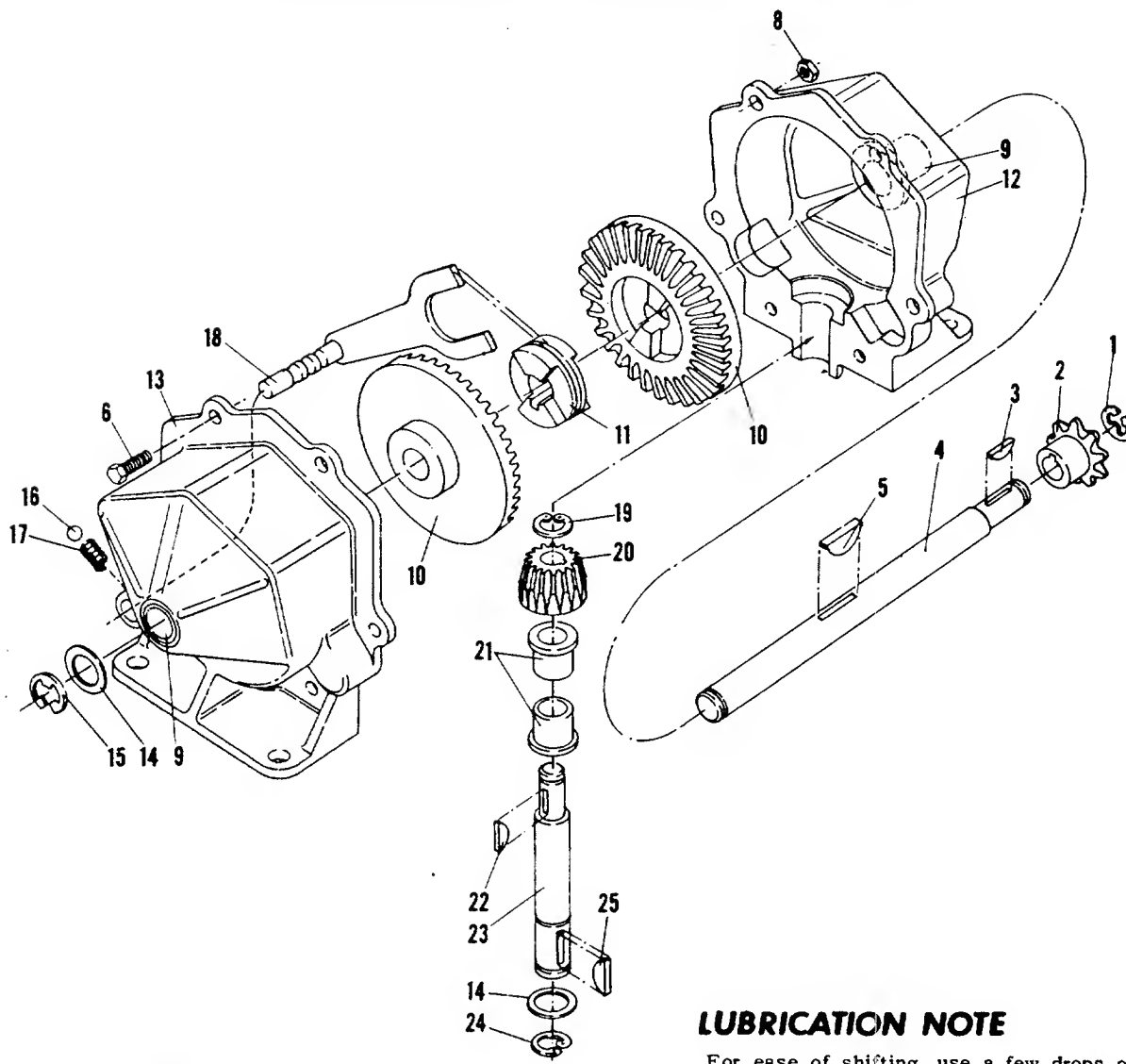
**IMPORTANT NOTE:** All parts with a prefix of 3 (with the exception of 305 and 310) are painted parts. The above parts list shows the standard colors of this model. If your mower has one of the optional colors, please order by the appropriate prefix.

312 — White	330 — Terra Cotta	351 — Terra Bronze	371 — Sierra Red	375 — Flat Black
313 — Copperstone	347 — Red Scarlet	353 — Red Flomboyant	372 — Rec. Red	383 — Blue

**FOR EXAMPLE:** Ref. No. 13 is 426-10057 Frame. If you order a blue frame you would order Part No. 383-10057. Always include the model number of your mower when ordering parts.

When ordering replacement parts, be sure to specify your mower model number, part number, description of part, and the number of parts required. . . . Parts and service should be handled by your nearest authorized service firm as recommended by your dealer. Request for parts and service received at the factory will be forwarded to the appropriate Central Service Distributor in your area for handling.

# 901-8500 REVERSING TRANSMISSION



## PARTS LIST

Key No.	Part No.	Description	Key No.	Part No.	Description
1	716-104	Snap Ring	14	736-116	Washer
2	748-852	Sprocket 8T, #41	15	716-106	Snap Ring
3	714-110	Key Hi-Pro HP 503	16	741-862	Ball-Detent
4	711-854	Shaft Output	17	732-863	Spring-Detent
5	714-126	Key Hi-Pro #606 Hardened	18	310-8583	Detent Shaft Ass'y
6	710-195	Hex Hd. Cap Screw 1/4-28 x 5/8*	19	716-865	Snap Ring #3100-50
8	712-117	Locknut 1/4-28 thd.	20	748-866	Bevel Pinion
9	748-855	Bearing	21	748-867	Bearing
10	748-856	Bevel Gear	22	714-110	Key Hi-Pro HP 503
11	748-857	Clutch Collar	23	711-869	Shaft Input
12	717-123	Housing Half	24	716-361	Snap Ring
13	717-124	Housing Half with Detent Hole	25	714-868	Key Woodruff #9*
				727-136	Lubriplate 310 4 ounces

\* For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on the parts list.

## LUBRICATION NOTE

For ease of shifting, use a few drops of oil as needed.

Transmission is prelubricated with four ounces of Lubriplate No. 310 Grease. Use this or an equivalent if service is necessary.

Order part number 727-136 for a 4 ounce container of Lubriplate No. 310 grease.

## GEAR SHIFTING INSTRUCTIONS

It is sometimes impossible to shift from one position to another if the Clutch Collar (Illus. 11) is not aligned with the Bevel Gear (Illus. 10). In order to mesh the gears and thus permit shifting it is necessary to:

1. Move mower forward or backward if engine is not running.
2. Depress clutch pedal slightly if engine is running.

To be assured of long, trouble free service, it is suggested that the shift lever never be forced into position, and that when the gears are meshed, they are meshed fully and not just part way. Following the above suggestions will eliminate wear which might otherwise take place in the internal area of the transmission gears and Clutch Collar.